

REMARKS

By the present amendment, Applicants have amended Claims 1 and 8 (renumbered), and canceled Claim 7. Claims 1-6 and 8 which remain pending in the present application for further consideration. Claim 1 is the sole independent claim.

In the recent Office Action, the Examiner objected to Claim 7. Claims 1 and 7 were rejected by the Examiner under 35 U.S.C. § 102(b) as being anticipated by Hutchinson (U.S. Patent No. 2,021,363). Claims 1 and 3-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cardwell (U.S. Patent No. 3,112,963) or Benzon et al.. (U.S. Patent No. 3,730,332) in view of Bilderback et al. (U.S. Patent No. 1,999,230). Claims 1 and 2 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Cardwell (U.S. Patent No. 3,112,963) or Benzon et al.. (U.S. Patent No. 3,730,332) in view of Japanese Patent No. JP9296881.

The last claim has been renumbered to read Claim -- 8 --, which should overcome the Examiner's objection of record. The revisions made to Claims 1 and 7 by the present amendment should serve to obviate the prior art grounds of rejection of record. Applicants will advance arguments herein below to illustrate the manner in which the invention defined by the newly introduced claims is patentably distinguishable from the cited and applied prior art. Reconsideration of the present application is respectfully requested.

Independent Claim 1 and Claim 8 have been amended to more particularly define the subject matter in question. The amended independent claim sets forth a device for temporary replacement of an auger carrier bearing on an auger conveyor system, wherein the auger conveyor system includes a flanged auger tray defining a trough and an auger having a shaft supported in the trough by a plurality of bearings. The claimed device comprises, in part, a U-bolt, a bearing mounting plate, and a strap. The U-bolt is defined as having an arch and two threaded legs extending from opposite ends of the arch. The mounting plate is defined as having a pair of openings aligned with the threaded legs of the U-bolt, and is characterized as being removably attached to the threaded legs and adapted for attachment to the auger tray across the trough. The strap is defined as also having a pair of openings aligned with the threaded legs of the U-bolt, and is further characterized as being substantially planar, removably disposed on the threaded legs and substantially parallel to the mounting plate. The claimed device further includes a lubrication pad attached to the lower surface of the strap and a lubrication strip attached to the arch of the U-bolt. The operational feature of claimed device is set forth by the “whereby” clause, which recites that “the auger shaft is supported by the U-bolt with the lubrication strip and the lubrication pad bearing on opposite sides of the auger shaft in order to support the auger in the trough.” This operational feature is substantially repeated in method Claim 8.

Applicant contends that the prior art relied upon of record fails to describe or reasonably suggest a device used for the temporary repair of auger conveyor system having the combination of structural and functional features as defined by the present claims.

The reference to Hutchinson discloses a hanger for screw conveyors comprising a depending arm 10, a pair of opposed lateral extending arms 11 and 12 integral with arm 10, wherein arm 11 is straight and arm 12 is curved. The lower end of arm 10 is provided with an integral bearing member 16 and a removable bearing member 17, each arcuately configured to engage the shaft S of the screw conveyor. The removable bearing member 17 includes an external channel 19 and a U-shaped bolt 20 engages the channel with the legs of the bolt extending along the sides of depending arm 10. There appears no description or suggestion in the Hutchinson reference of a substantially planar strap having a pair of openings aligned with the threaded legs of the U-bolt, and being removably disposed on the threaded legs and substantially parallel to the mounting plate as defined by the present claims. Also, while Hutchinson contemplates bearings for engaging the shaft, there appears no mention in this reference that the bearings can be a lubrication pad attached to the lower surface of the strap and a lubrication strip attached to the arch of the U-bolt as called for by the present claims. It is apparent from the reference disclosure that Hutchinson's invention is adapted to prevent clogging the trough by providing a permanent hanger constructed with an arcuate arm extending across the top of the trough. In contrast, Applicants' invention serves as a temporary replacement hanger that is quickly and easily installed when an auger carrier bearing fails to avoid costly down-time. Clearly, Applicant's temporary replacement device is structurally different from the permanent hanger construction taught by Hutchinson.

In order to show anticipation under 35 U.S.C. 102, the reference must show every element of the claimed invention identically. *Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1 USPQ2d 1081 (Fed. Cir. 1986), *Akzo N.V. v. United States Intl. Trade Commission*, 808 F.2d 1471, 1 USPQ2d 1241 (Fed. Cir. 1986). Not only must every element claimed be shown in the prior art reference, but every claimed limitation of each of the elements must be shown; otherwise, the only possible rejection is for obviousness under 35 U.S.C. 103. *Atlas Powder Co. v. E.I. du Pont de Nemours & Co.*, 750 F.2d 1569, 224 USPQ 409 (Fed. Cir. 1984), *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

Applicants contend that the patent to Hutchinson is deficient as anticipatory reference against Claims 1 and 7 since this reference fails to disclose the essential structural features of Applicants' temporary replacement device that form the basis of the present claims. Further, it is Applicants' contention that the reference to Cardwell or Benzon et al., taken in combination with Bilderback et al. or the Japanese reference (JP '881), are insufficient to render the presently claimed invention obvious within the meaning of 35 U.S.C. 103.

The Examiner cites the Cardwell and Benzon et al. references to apparently show that screw conveyors having an auger shaft, an auger tray, a top plate and a bearing device are known in the art. The Examiner concedes that neither Cardwell nor Benzon et al. discloses Applicants' claimed bearing device, and relied upon Fig. 1 of Bilderback et al. to show an auger bearing supposedly having the

claimed features. Notwithstanding, the conveyor hanger with adjustable bearing taught by Bilderback et al. is similar in construction to that of Hutchinson and therefore suffers from the same deficiencies as discussed supra. The reference to Bilderback et al. discloses a hanger for a screw conveyor comprising a depending member 2 integrally connected to lateral extending support members. The lower end of depending member 2 is provided with an integral upper bearing member 3 and a lower bearing member 4, each arcuately configured to engage the shaft of the screw conveyor. The lower bearing member 4 is adjustably supported by a U-shaped member 6 having arms that extend along the sides of depending member 2. There appears no description or suggestion in the Bilderback et al of a substantially planar strap having a pair of openings aligned with the threaded legs of the U-bolt, and being removably disposed on the threaded legs and substantially parallel to the mounting plate as defined by the present claims. Also, there appears no mention in this reference that the bearings can be a lubrication pad attached to the lower surface of the strap and a lubrication strip attached to the arch of the U-bolt as called for by the present claims. There can be no question that Applicants' temporary replacement device is structurally different from the permanent hanger construction taught by Bilderback et al.

The Examiner relies upon the Japanese reference (JP 9296881) to allegedly show a hanger device having Applicants' claimed features. Notwithstanding, this Japanese reference realistically describes an electrical insulating U-bolt made by inserting a U-bolt body into a U-shaped insulation tube consisting of a thermoplastic resin, such as polytetrafluoroethylene (PTFE). Applicants contend

that the electrical insulating U-bolt of the Japanese reference is so structurally and functionally unrelated to the screw conveyors taught by Cardwell and Benzon et al. that any assumption that one of ordinary skill in the art would likely be motivated to combine these references in the manner suggested by the Examiner is completely unfounded. In any event, Japanese reference (JP '881) fails to supplement the above noted deficiencies of the Cardwell and Benzon et al. references.

Applicants note that obviousness cannot be shown by combining the teachings of the prior art unless there is some teaching or incentive supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984); *In re Geiger*, 815 F.2d at 688, 2 USPQ2d at 1278 (Fed. Cir. 1987). Further, the Federal Circuit in *In re Dembiczaik*, 175 F.3rd 994, 50 USPQ2d 1614 (Fed.Cir. 1999) deprecated rejections based upon "a hindsight-based obviousness analysis" and emphasized that what is required is a "rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." The Court said that "the showing must be clear and particular" and that broad conclusory statements regarding the teaching of multiple references and "a mere discussion of the ways that the multiple prior art references can be combined to read on the claimed invention" is inadequate. Absent an explicit suggestion or teaching of the combination in the prior art references, there must be "specific...findings concerning the identification of the relevant art, the level of ordinary skill in the art, the nature of the problem to be solved, or any other factual findings that might serve to support a proper obviousness analysis".

Applicants contend that even if the references relied upon of record were properly combinable, the above noted deficiencies of the Hutchinson, Cardwell and/or Benzon et al.. are not remedied by the realistic teachings afforded by the Bilderback et al. and/or Japanese Patent No. JP9296881. Thus, one of ordinary skill in the art without the benefit of Applicants' own disclosure would not be capable of arriving at the presently claimed invention by combining the references in the manner suggested by the Examiner since none of references cited or applied of record realistically suggests the essential combination of structural features that forms the basis of the instant claims. For at least these reasons, Applicant respectfully submits that independent Claim 1, as amended, and corresponding new dependent Claims 2-6 and 8 are allowable over the prior art of record.

For the foregoing reasons, Applicant respectfully submits that the present application is in condition for allowance. If such is not the case, the Examiner is requested to kindly contact the undersigned in an effort to satisfactorily conclude the prosecution of this application.

Respectfully submitted,



Dolph H. Torrence
Registration No. 34,501
(703) 486-1000